Recovery Plan Action Status

Plan Name: Arizona Cliffrose (Purshia subintegra) Recovery Plan

Plan Status: Final Plan Date: 16-Jun-95 Lead Agency: USFWS

Lead Office: Arizona Ecological Services Field Office 242-0210)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	1a	Develop conservation strategy on SCIR	Unknown			U.S. Fish and Wildlife Service, Ecological Services Division, Bureau of Indian Affairs, USFWS Regional Office 2, San Carlos Apache Tribe	Management: General	Labor type not yet selected	ES costs = 2K/year. BIA costs = 3K/year. SCA costs = 3K/year.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	2	1b	Designate special management areas	Complete		FY 1995 - FY 1999	Bureau Land Management	Management	Labor type not yet selected	BLM costs = 0.5K/year. CNF costs = 0.5K for FY1. TNF costs: FY1 = 2K, FY2 = 1K.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	1c, 1g	Develop conservation strategies/agreeme nts on federal, State and private land	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management, Arizona State Land Department, USFWS Regional Office 2, Tonto National Forest, Coconino National Forest	Management: Planning	Labor type not yet selected	ES costs = 5K/year. BLM costs = 5K/year. CNF costs =6K/year. TNF costs = 5K/year. AZSL costs = 5K/year. Draft Verde Valley Botanical Area Management Plan
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	2b	Conduct surveys	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest, San Carlos Apache Tribe		Labor type not yet selected	No ES costs. SCA = 5K/year. CNF = 5K for FY1. TNF = 4K/year. BLM = 4K/year.

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Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	2c	Monitor population dynamics	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest, San Carlos Apache Tribe	Research: Population Surveys	Labor type not yet selected	ES costs: FY1 = 4K, FY2&3 = 2K/year. BLM costs: FY1 = 10K, FY2&3 = 6K/year. CNF costs: FY1 = 10K, FY2&3 = 6K/year. TNF costs: FY1 = 10K, FY2&3 = 6K/year. SCA costs: FY1 = 10K, FY2&3 = 3K/year.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	2d	Describe life history characters	Partially Complete	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest, San Carlos Apache Tribe	Research: General	Labor type not yet selected	ES costs = 1K/year. BLM costs = 8K/year. CNF costs = 8K/year. TNF costs = 8K/year. SCA costs = 8K/year. Arboretum at Flagstaff has been conducting research on the Arizona Cliffrose.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	2d.1	Study seed germination & seedling establishment requirements	Partially Complete	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest, San Carlos Apache Tribe	Work type not yet selected	Labor type not yet selected	BLM costs = 4K/year. CNF costs = 4K/year. TNF costs = 4K/year. SCA costs = 4K/year.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	2d.2	Contrast recruitment rates between populations	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest, San Carlos Apache Tribe	Work type not yet selected	Labor type not yet selected	Majority of cost imbedded in task 2c. ES costs = 5K/year. BLM costs = 2K/year.CNF costs = 2K/year. TNF costs = 2K/year. SCA costs = 2K/year.

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Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	2d.3	Determine growth rates	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest, San Carlos Apache Tribe	Work type not yet selected	Labor type not yet selected	Majority of cost imbedded in task 2c. ES costs: FY1 = 15K, FY2&3 = 1K/year. BLM costs = 1K/year. CNF costs = 1K/year. TNF costs = 1K/year. SCA costs = 1K/year.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	2	2e	Refine taxonomy	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Research: Taxonomic Studies	Labor type not yet selected	Yavapai County Public Works Department provided \$75,000 to the Arboretum at Flagstaff for the purpose of collecting and preserving genotypes of cliffrose lost due to the Mingus Avenue Extension Project. Report by Frank W. Reichenbacher on the Identity of Purshia subintegra.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	3	2e	Develop propagation techniques	Partially Complete	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	2	2f	Describe plant/insect interactions	Partially Complete	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Research: Other Information	Labor type not yet selected	The pollination biology of Arizona Cliffrose including a report on experimental hybridization with its sympatric congener P. stansiburiana - by Robert D. Fitts, V.J. Tepedino, and Terry L. Griswold.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	3a.1, 3a.2	Manage mining projects	Unknown			U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest	Work type not yet selected	Labor type not yet selected	ES costs = 1K/year. BLM costs = 1K/year. CNF costs = 1K/year. TNF costs = 1K/year. Unaware of any upcoming mining projects in cliffrose habitat.

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Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	3a.3	Permanently protect from mining	Partially Complete		FY 1995 - FY 1999	Bureau Land Management	Management	Labor type not yet selected	ES costs = 0.5K/year. BLM costs = 0.5K/year. CNF costs = 0.5K/year. TNF costs = 0.5K/year.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	3b.1	Develop, revise, and implement AMPs	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest	Management: Planning	Labor type not yet selected	BLM costs = 1K/year. CNF costs = 1K/year. TNF costs: FY1 = 4K, FY28.3 = 1K/year. ES costs = 1K/year. Consultation on Windmill grazing allotment 05/28/1998
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	3b.2	Review grazing use	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest	Management: Land Use	Labor type not yet selected	BLM costs = 1K/year. CNF costs = 1K/year. TNF costs = 1K/year.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	2	3b.3	Grazing decisions/section 7 compliance	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , Bureau of Indian Affairs, USFWS Regional Office 2, Tonto National Forest, Coconino National Forest	Management: Planning	Labor type not yet selected	BIA costs = 1.5K. TNF costs = 1.5K.Consultation on Windmill grazing allotment 05/28/1998
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	3b.4	Maintain exclosure fence at Burro Creek	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	

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Arizona Cliff-rose (Purshia (=Cowania) subintegra)	3	3b.5	Educate livestock operators	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , Bureau of Indian Affairs, USFWS Regional Office 2, Tonto National Forest, Coconino National Forest, San Carlos Apache Tribe	Work type not yet selected	Labor type not yet selected	BLM costs = 0.5K/year. CNF costs = 0.5K/year. TNF costs = 0.5K/year. BIA costs = 0.5K/year. SCA costs = 0.5K/year.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	2	3c.1	Land exchanges	Partially Complete	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2, Coconino National Forest	Work type not yet selected	Labor type not yet selected	Yavapai County purchased approximately 369 acres, which includes 358 acres for Arizona cliffrose conservation.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	3c.2	Permanently protect from urbanization	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Arizona State Land Department, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	AZSL costs are unknown.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	3d.1	Construct no new roads, trails or utilities	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , Bureau of Indian Affairs, USFWS Regional Office 2, Tonto National Forest, Coconino National Forest	Work type not yet selected	Labor type not yet selected	On March 9, 2001 the Mingus Avenue Extension Biological Opinion was completed which was a road project through cliffrose habitat.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	2	3d.2	Reduce effects of existing roads, recreation, and utilities	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona Department of Transportation, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest	Work type not yet selected	Labor type not yet selected	BLM costs = 1K. CNF costs = 1K. TNF costs = 1K. ADOT costs = 1K.

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Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	3e.1	Eliminate or reduce threats from recreation	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , USFWS Regional Office 2, Tonto National Forest, Coconino National Forest	Work type not yet selected	Labor type not yet selected	BLM costs: FY1 = 5K, FY2&3 = 0.5K. CNF costs: FY1 = 5K, FY2&3 = 0.5K. TNF costs = 0.5K/year. There are no ES costs associated with this task.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	3e.2	Remove shooting range & restore habitat	Unknown			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2, Coconino National Forest	Work type not yet selected	Labor type not yet selected	All costs are CNF.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	2	3e.3	Prohibit ORV use	Unknown			U.S. Fish and Wildlife Service, Ecological Services Division, Arizona Department of Agriculture, Bureau Land Management , Arizona State Land Department, USFWS Regional Office 2, Coconino National Forest	Work type not yet selected	Labor type not yet selected	BLM costs = 2K. CNF costs = 20K. ADA costs = 0.5K.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	2	3e.4	Educate ORV users	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	ES costs = 1K for FY1. CNF costs = 0.5K/year.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	2	3f	Study wildlife browsing	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	All costs are TNF.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	3	3h	Prevent inundation	Unknown			U.S. Fish and Wildlife Service, Ecological Services Division, Bureau of Reclamation, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	2	4a	Enforce AZ state laws	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Arizona Department of Agriculture, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	All costs are ADA.

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Arizona Cliff-rose (Purshia (=Cowania) subintegra)	3	4b	Patrol habitat, Cottonwood	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Arizona Department of Agriculture, USFWS Regional Office 2, Coconino National Forest	Work type not yet selected	Labor type not yet selected	ADA cost included in task 4a. All costs are CNF.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	3	4c	Designate critical habitat	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Other: Regulations	Labor type not yet selected	No immediate plans are underway to designate critical habitat for this species.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	1	4d	Enforce grazing permits	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Bureau Land Management , Bureau of Indian Affairs, USFWS Regional Office 2, Tonto National Forest, Coconino National Forest	Management: General	Labor type not yet selected	BLM costs = 0.5K/year. CNF costs = 0.5K/year. TNF costs = 0.5K/year. BIA costs = 0.5K/year. Windmill grazing allotment cosulted on in 05/28/1998 and 10/27/1997.
Arizona Cliff-rose (Purshia (=Cowania) subintegra)	3	5	Information & education	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 2	Other: Information and Education	Labor type not yet selected	